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10/554,855	10/18/2006	Kenji Otoda	49288.1600	4197
2022 7590 12/11/2009 SNELL & WILMER L.L.P. (Main) 400 EAST VAN BUREN ONE ARIZONA CENTER PHOENIX, AZ 85004-2202				
EXAMINER DENTER, CLARK F				
ART UNIT		PAPER NUMBER		
3724				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/554,855

## Applicant(s)

OTODA ET AL.

## Examiner

Clark F. Dexter

## Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-54 and 56-96 is/are pending in the application.
- 4a) Of the above claim(s) 5, 6, 8-28, 31, 36-48, 53, 54, 56-79 and 84-96 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 29, 30, 32-35, 49-52 and 80-83 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-846)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/28/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Group I, Species IA (claims 1-6, 29, 32-37, 49-54, and 80-85) in the reply filed on May 19, 2009 is acknowledged. It is noted that the Examiner respectfully disagrees with applicant's designation of the claims pertaining to species A since claims 5, 6, 36, 37, 53, 54, 84 and 85 are directed to the pressing means being a conveyor (e.g., Figs. 3b, 5b) and a bearing (e.g., Figs. 3c, 5c) which species were not elected and are distinct from the elected species of the roller. Thus, claims 1-4, 29, 30, 32-35, 49-52, and 80-83 will be examined. Claims 5, 6, 8-28, 31, 36-48, 53, 54, 56-79, 84-95 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention/species.

### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

3. The information disclosure statement filed on October 28, 2005 has been received and the references listed thereon have been considered.

***Drawings***

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first press controlling means as set forth in claim 1 (lines 4-5) and the second press controlling means as set forth in claim 32 (line 7) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

5. The disclosure is objected to because of the following informalities:

In paragraph 00171, line 2, it seems that "7" should read --6--.

In paragraph 00172, line 2, it seems that "7" should read --6--.

In paragraph 00174, line 2, it seems that "8" should read --7--.

Appropriate correction is required.

***Claim Objections***

6. Claims 1-4, 29, 30, 32-35, 49-52, and 80-83 are objected to because of the following informalities:

In claim 1, line 12, "surface" is misspelled.

In claims 32-35, the use of the recitation "bonded substrate" renders the claims confusing and unclear with respect to the language used in claims 1 and 30 from which these claims depend, and it is suggested to change all occurrences of "bonded substrate", "bonded substrate pressing means" and "bonded substrate holding means" to --brittle substrate--, --pressing means-- and --holding means--, respectively, for clarity and consistency.

In claims 80-83 (similar to claims 32-35), the use of the recitation "bonded substrate" renders the claims confusing and unclear with respect to the language used in claim 49 from which these claims depend, and it is suggested to change all occurrences of "bonded substrate", "bonded substrate pressing means" and "bonded

substrate holding means" to --brittle substrate--, --pressing means-- and --holding means--, respectively, for clarity and consistency.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112, 1<sup>st</sup> paragraph***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 29, 30, 32-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification and drawings do not provide support for a breaking apparatus that forms the scribing line as set forth in claim 29 (lines 4-5) and claim 30 (line 2). Rather, support is provided for a scribing unit that forms the scribing line.

***Claim Rejections - 35 USC § 112, 2<sup>nd</sup> paragraph***

9. Claims 1-4, 29, 30, 32-35 and 80-83 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 2, the recitation "the brittle substrate" lacks positive antecedent basis; in lines 3-4, the recitation "a brittle substrate" is vague as to whether it refers to that previously set forth or to another such brittle substrate; in line 6, the recitation "a scribing line" is vague as to whether it refers to that previously set forth or to another such scribing line.

In claim 30, lines 1-2, the recitation "the scribing apparatus" lacks antecedent basis.

In claim 32, lines 3-4, the recitation "the bonded substrate" lacks antecedent basis; in the last line, the recitation "the second scribing line" lacks antecedent basis and is vague as to what line is being referred.

In claim 33, line 2, the recitation "a first controlling means" is vague as to what disclosed structure it refers, particularly as to whether it refers to the "first pressing controlling means" set forth in claim 1 or to another such first controlling means; also in line 2, the recitation "the pressing means" is vague as to which one; in line 3, the recitation "the first bonded substrate pressing means" lacks antecedent basis; in line 4, the recitation "the first bonded substrate holding means" lacks antecedent basis; in line 6, the recitation "a second controlling means" is vague as to what disclosed structure it refers, particularly as to whether it refers to the "second pressing controlling means" set forth in claim 32 or to another such second controlling means; also in line 2, the recitation "the pressing means" is vague as to which one.

In claim 34, line 2, the recitation "the pressing means" is vague as to which one; in line 4, the recitation "the pressing means" is vague as to which one.

In claim 80, line 3, the recitation "the brittle substrate" lacks positive antecedent basis; in line 8, the recitation "the second pressing controlling means" lacks antecedent basis.

In claim 81, line 3, the recitation "the first bonded substrate pressing means" lacks antecedent basis; in line 4, the recitation "the first bonded substrate holding means" lacks antecedent basis; in line 8, the recitation "the second scribing line" lacks antecedent basis and is vague as to what line is being referred.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 49-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Le Gras, pn 3,259,286.

Le Gras discloses a device on which every method step is performed as follows:  
breaking, by a breaking apparatus (e.g., 12), a brittle substrate along a scribing line,

wherein the breaking apparatus includes a pressing means (e.g., 20) for pressing the second surface of the brittle substrate; and

a first holding means (e.g., 14) for holding a first surface of the brittle substrate,



controlling the pressing means such that the pressing means moves along the scribing line while the pressing means presses the second surface of the brittle substrate opposing the first surface of the brittle substrate with the first surface of the brittle substrate being held by the first holding means (e.g., by 29 and as described in col. 4, lines 50-52),

wherein a groove section (e.g., 25) is formed in the pressing means such that the pressing means does not contact with a line on the second surface of the brittle substrate, the line opposing the scribing line;

[claim 50] wherein the controlling step includes the step of moving the pressing means along the scribing line while the first holding means and the pressing means oppose each other with the brittle substrate therebetween (e.g., as described in col. 4, lines 50-52);

[claim 51 (from 50)] wherein the controlling step includes the step of controlling the pressing means such that the pressing means rolls along the scribing line;

[claim 52 (from 51)] wherein the pressing means is a roller  
(e.g., 20).

***Claim Rejections - 35 USC § 102/103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 1-4, 29 and 30 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Le Gras, pn 3,259,286.

Le Gras discloses a cutting system as follows:

a breaking apparatus (e.g., 12) for breaking the brittle substrate along a scribing line,

wherein the breaking apparatus includes a pressing means (e.g., 20) for pressing a second surface of a brittle substrate, a first holding means (e.g., 14) for holding a first surface of the brittle substrate, and a first pressing controlling means (e.g., 29 and the structure described for the operation in col. 4, lines 50-52) for controlling the pressing means such that the pressing means moves along a scribing line while the pressing means presses the second surface of the brittle substrate opposing the first surface of

the brittle substrate with the first surface of the brittle substrate is being held by the first holding means,

wherein a groove section (e.g., 25) is formed in the pressing means such that the pressing means does not contact with a line on the second surface of the brittle substrate, the line opposing the scribing line;

[claim 2] wherein the first pressing controlling means controls the pressing means such that the pressing means moves along the scribing line while the first holding means and the pressing means oppose each other with the brittle substrate therebetween (e.g., as described in col. 4, lines 50-52);

[claim 3] wherein the first pressing controlling means controls the pressing means such that the pressing means rolls along the scribing line;

[claim 4 (from 3)] wherein the pressing means is a roller (e.g., 20);

[claim 29] wherein the first pressing controlling means controls the pressing means such that the pressing means moves along the scribing line while the first holding means and the pressing means oppose each other with the brittle substrate therebetween and while the breaking apparatus forms (i.e., as best understood) the scribing line on the first surface of the brittle substrate;

[claim 30] wherein the scribing apparatus comprises the breaking apparatus for forming the scribing line on the first surface of the brittle substrate while the first surface of the brittle substrate is held, and

the breaking apparatus further comprises a pressing means for pressing the second surface opposing the first surface of the brittle substrate.

***Claim Rejections - 35 USC § 103***

14. Claims 32-35 and 80-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Le Gras, pn 3,259,286.

Le Gras discloses an apparatus with almost every structural limitation of the claimed invention but lacks a second occurrence of the corresponding structure of the apparatus. It is noted that Le Gras discloses the structure set forth in these claims in the same manner as described above for claims 1, 49 and the corresponding dependent claims. However, the Examiner takes Official notice that it is old and well known in the art to treat multiple portions of a workpiece simultaneously or serially to efficiently machine a workpiece; for example, to conserve time and space. Therefore, it would have been obvious to one having ordinary skill in the art to provide additional cutting such breaking/cutting on or with the structure of Le Gras to make additional cuts simultaneously and/or serially to gain the well known benefits including those described above.

***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark F. Dexter whose telephone number is (571)272-4505. The examiner can normally be reached on Mondays, Tuesdays, Thursdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571)272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Clark F. Dexter/  
Primary Examiner, Art Unit 3724**

cfd  
December 7, 2009